LETTERS

HEALTH COMMUNICATION, INTELLIGENCE, AND HEALTH DIFFERENTIALS

In a recent editorial, Freimuth and Quinn¹ discussed the contribution that health communication might make to eliminating health disparities. The mechanisms underlying the recently suggested role of intelligence (denoted here by IQ) in the etiology of several important health outcomes are pertinent to this debate.

In long-term follow-up studies, persons with low scores on written IQ tests administered in childhood and early adulthood have been found to have elevated rates of all-cause mortality,² coronary heart disease,³ some cancers,4 and psychiatric disorders5 than their higher-scoring counterparts in later life. For the most examined health outcome-all-cause mortality-these effects are strong (exceeding those of other psychological characteristics, such as personality disposition, and on a par with the effects of established risk factors such as raised blood pressure, social disadvantage, and obesity), incremental (apparent across the full range of IQ scores, not just confined to below-average scores), consistent across a number of study populations and research groups, and seemingly independent of childhood social circumstances.6

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IQ reflects an individual's ability to learn, reason, and solve problems. Therefore, plausible mechanisms underlying these observations that have particular relevance to health communications—defined by Freimuth and Quinn as the study of methods that influence decisions that enhance health—concern the conceptualization of self-health care as a set of cognitive tasks. These tasks include the optimal interpretation of health prevention messages and, among persons with existing chronic illness, improved disease management.

In terms of the former, Scottish children who scored high on tests of intelligence in 1932 were more likely than others to stop smoking as adults in the 1960s and 1970s.8 This observation may be attributable to the differential interpretation of antismoking advice that appeared for the first time during this period. With regard to disease management, the daily management of one's illness is cognitively demanding; it requires ongoing learning and independent decisionmaking. Persons with low levels of education or health literacy, both of which are related to IQ,⁷ are less likely to appreciate when their conditions require medical attention, to be aware of the appropriate actions to take when they do realize they need attention, and to correctly comprehend instructions for self-medication.9 They may also fail to seek medical advice promptly after a significant illness episode (e.g., myocardial infarction) and receive treatment at a facility most appropriate to their clinical requirements.9

Health care advice, treatment protocols, and disease prevention information may exceed the intellectual capacity of some people. 9,10 If this is the case, and since highly simplified advice might substantially reduce the intended impact of the advice, proactive involvement of health care providers in the provider—client interaction, as advocated by Freimuth and Quinn, 1 might reduce health differentials.

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